

WHAT IS CLAIMED:

1. An apparatus for connecting a first optical connector to a second optical connector, the apparatus comprising:
 - a) a housing having at least a first end and at least a second end, the first end of the housing capable of receiving the first optical connector, and the second end of the housing capable of receiving the second optical connector;
 - b) a longitudinal cavity extending from the first end of the housing to the second end of the housing; and
 - c) an electromagnetic shield involved in at least a portion of the housing.
2. An apparatus as in claim 1, wherein the electromagnetic shield comprises a metallic coating on a least a portion of the housing.
3. An apparatus as in claim 1, wherein the longitudinal cavity is capable of facilitating the alignment of the first optical connector and the second optical connector.
4. An apparatus as in claim 3, further comprising alignment guides inside the longitudinal cavity of the housing, the alignment guides capable of aligning the first optical connector to the second optical connector.
5. An apparatus as in claim 1, further comprising alignment wings adapted to the second end of the housing, the wings capable of holding the second optical connector.
6. An apparatus as in claim 1, further comprising a cavity at the first end of the housing, the cavity functioning to house at least optoelectronic circuitry used in connection with the first optical connector.
7. An apparatus as in claim 6, wherein the cavity houses at least a portion of a flexible printed circuit board that is adapted to a mounting structure.
8. An apparatus as in claim 1, further comprising tabs adapted to the first end of the housing, the tabs capable of mating with slots on a mounting structure.
- 20 9. An apparatus as in claim 1, further comprising alignment pins adapted to the first end of the housing, the alignment pins capable of mating with pin-positioning holes on a mounting structure.

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11. An apparatus as in claim 1, further comprising pin-positioning holes adapted to the first end of the housing, the pin-positioning holes capable of mating with alignment pins on a mounting structure.

5 12. An apparatus as in claim 1, further comprising screws adapted to the first end of the housing, the screws capable of mating with screw holes on a mounting structure.

13. An apparatus as in claim 1, further comprising screw holes adapted to the first end of the housing, the screw holes capable of mating with screws on a mounting structure.

10 14. An apparatus as in claim 1, wherein the first and second optical connectors are MT-type connectors.

15 15. An apparatus as in claim 14, wherein the first and second optical connectors are MT-type ferrules.

16. An apparatus for connecting a first optical connector to a second optical connector, the apparatus comprising:

20 a) a housing having at least a first end and at least a second end, the first end of the housing capable of receiving the first optical connector, and the second end of the housing capable of receiving the second optical connector;

b) a longitudinal cavity extending from the first end of the housing to the second end of the housing; and

c) an elastomeric member proximate to the first end of the housing and capable of generating an outward elastomeric force.

25 17. An apparatus as in claim 16, wherein the elastomeric member capable of facilitating the connection of the housing to a mounting structure.

18. An apparatus as in claim 16, wherein the longitudinal cavity is capable of facilitating the alignment of the first optical connector and the second optical connector.

19. An apparatus as in claim 18, further comprising alignment guides inside the longitudinal cavity of the housing, the alignment guides capable of aligning the first optical connector to the second optical connector.

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20. An apparatus as in claim 16, further comprising alignment wings adapted to the second end of the housing, the wings capable of holding the second optical connector.

21. An apparatus as in claim 16, further comprising a cavity at the first end of the housing, the cavity functioning to house at least optoelectronic circuitry used in connection with the first optical connector.

22. An apparatus as in claim 21, wherein the cavity houses at least a portion of a flexible printed circuit board that is adapted to a mounting structure.

23. An apparatus as in claim 16, further comprising tabs adapted to the first end of the housing, the tabs capable of mating with slots on a mounting structure.

24. An apparatus as in claim 16, further comprising alignment pins adapted to the first end of the housing, the alignment pins capable of mating with pin-positioning holes on a mounting structure.

25. An apparatus as in claim 16, further comprising pin-positioning holes adapted to the first end of the housing, the pin-positioning holes capable of mating with alignment pins on a mounting structure.

26. An apparatus as in claim 16, further comprising screws adapted to the first end of the housing, the screws functioning to mate with screw holes on a mounting structure.

27. An apparatus as in claim 16, further comprising screw holes adapted to the first end of the housing, the screw holes functioning to mate with screws on a mounting structure.

28. An apparatus as in claim 16, wherein the first and second optical connectors are MT-type connectors.

29. An apparatus as in claim 16, wherein the first and second optical connectors are ferrules.

30. An apparatus as in claim 29, wherein the first and second optical connectors are MT-type ferrules.

31. An apparatus for connecting a first optical connector to a second optical connector, the first optical connector adapted to a mounting structure and the second optical connector adapted to one end of a fiber optic cable, the apparatus comprising:

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- a) a housing having at least a first end and at least a second end, the first end of the housing capable of receiving the first optical connector, and the second end of the housing capable of receiving the second optical connector;
- b) a longitudinal cavity extending from the first end of the housing to the second end of the housing; and
- c) alignment members adapted to a first end of the longitudinal cavity, the alignment members capable of positioning the first optical connector in alignment with the second optical connector.

32. An apparatus as in claim 31, wherein the alignment members function to hold and align the position of the first optical connector relative to the position of the housing.

33. An apparatus as in claim 31, wherein the longitudinal cavity is capable of facilitating the alignment of the first optical connector and the second optical connector.

34. An apparatus as in claim 31, further comprising alignment guides inside the longitudinal cavity of the housing, the alignment guides capable of aligning the first optical connector to the second optical connector.

35. An apparatus as in claim 31, further comprising alignment wings adapted to the second end of the housing, the wings capable of holding the second optical connector.

36. An apparatus as in claim 31, further comprising a cavity at the first end of the housing, the cavity functioning to house at least optoelectronic circuitry used in connection with the first optical connector.

37. An apparatus as in claim 36, wherein the cavity houses at least a portion of a flexible printed circuit board that is adapted to a mounting structure.

38. An apparatus as in claim 31, further comprising tabs adapted to the first end of the housing, the tabs capable of mating with slots on a mounting structure.

39. An apparatus as in claim 31, further comprising alignment pins adapted to the first end of the housing, the alignment pins capable of mating with pin-positioning holes on a mounting structure.

40. An apparatus as in claim 31, further comprising pin-positioning holes adapted to the first end of the housing, the pin-positioning holes capable of mating with alignment pins on a mounting structure.

41. An apparatus as in claim 31, further comprising screws adapted to the first end of the housing, the screws capable of mating with screw holes on a mounting structure.

5 42. An apparatus as in claim 31, further comprising screw holes adapted to the first end of the housing, the screw holes capable of mating with screws on a mounting structure.

43. An apparatus as in claim 31, wherein the first and second optical connectors are MT-type connectors.

10 44. An apparatus as in claim 31, wherein the first and second optical connectors are ferrules.

45. An apparatus as in claim 44, wherein the first and second optical connectors are MT-type ferrules.

15 46. An apparatus for housing a flexible printed circuit board, the apparatus comprising:

- a mounting structure having at least a first surface and a second surface;
- b) alignment ridges along the first and second surfaces of the mounting structure, the alignment ridges capable of securing a flexible printed circuit board that is wrapped around and attached to the first and second surfaces of the mounting structure; and

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- c) a series of heat sink ridges adapted to the mounting structure, the heat sink ridges functioning to dissipate heat that is generated from the flexible printed circuit board.

47. An apparatus as in claim 46, further comprising a cavity in a first end of the mounting structure, the cavity capable of housing at least a portion of the flexible printed circuit board that is wrapped around and attached to the mounting structure.

25 48. An apparatus as in claim 46, further comprising slots adapted to a first end of a mounting structure, the slots capable of receiving tabs from a housing.,

49. An apparatus as in claim 46, further comprising pin-positioning holes on a first end of the mounting structure, the pin-positioning holes capable of receiving alignment pins from a housing.

50. An apparatus as in claim 46, further comprising screw holes on the first end of the mounting structure, the screw holes capable of receiving screws from an housing.

51. An apparatus as in claim 46, further comprising screws adapted to a first end of the housing, the screws capable of mating with screw holes on a mounting structure.